TEMPORARY HULL ACCESSES

1. SCOPE

1.1 Scope. This standard specification describes the requirements for the Contractor to install and close temporary accesses onboard Coast Guard vessels.

2. APPLICABLE DOCUMENTS

Coast Guard Maintenance and Logistics Command Atlantic (MLCA), Standard Specification 0740_STD, Welding and Allied Processes, 2001 Edition

Title 29, Code of Federal Regulations (CFR), Part 1915, Occupational Safety and Health Standards for Shipyard Employment, 1 Jul 2000 Edition

3. REQUIREMENTS

3.1 Prior approval. The Contractor shall not create access openings in the vessel's side shell plating, bottom plating, main longitudinal structure, transverse structure, decks, or non-continuous longitudinal structure without specific authorization of the Contracting Officer (KO).

3.2 Drawing submission. A minimum of three working days before creating a temporary hull access, the Contractor shall submit one legible drawing of the proposed access to the KO for authorization. The drawing shall include as a minimum:

- A description of the temporary access, including interferences, and contractor plans for removal and reinstallation of these interferences.
- A plan and elevation view specifying the access location by deck, frame, and distance from the centerline or deck edge; in addition to showing the location of adjacent penetrations, bulkheads, framing, and welds within 12 inches of the proposed cut.
- Location and number of previous cuts in each plate including crossing and removal of existing welds.

- Thickness and material of plating and structural members to be cut.

- Temporary structural reinforcement required to prevent distortion of ship's structure.

- The welding procedures for removal and reinstallation of access closure plates.

NOTICE

Contractor submissions should address the form, fit, size, and dimensions of accesses, in addition to structural reinforcements for multi-frame accesses.

3.3 Access cut boundaries. The Contractor shall ensure that access cuts comply with the requirements and restrictions detailed in MLCA Standard Specification 0740_STD, and referenced codes.

3.4 Ship integrity maintenance. The Contractor shall maintain ship integrity by installing temporary guarding and coaming, in addition to weathertight and watertight closures. Remove these temporary fabrications after closing the hull access, and grind surfaces flush in way of removals.

3.4.1 Guarding. Install temporary guards in accordance with 29 CFR 1915.73.

3.4.2 Coaming. Ensure the following:

3.4.2.1 Accesses through decks shall include coaming at least four inches high around the cuts.

3.4.2.2 Coaming shall be tack welded to the deck, using a staggered intermittent fillet weld, and fully sealed with caulking compound.

3.4.3 Weathertight and contamination closures. Fabricate temporary closures, using fire retardant material, before cutting access openings and install closures whenever access is not in use. Closures shall be:

- Constructed to protect the access from inclement weather and entry of contaminants
- Fitted with fasteners which permit rapid installation and removal
- Supported a minimum of 150 pounds per square foot for horizontal deck closures.

3.4.4 Watertight closures. Ensure that access openings created four feet or less above the maximum anticipated waterline shall include temporary watertight closures when the vessel is waterborne.

NOTICE

Watertight closures may include a watertight box patch with strongback.

3.5 Closure plate restoration. The Contractor shall remove the temporary closures, when no longer required, and install permanent closure plates in accordance with applicable drawing(s).

4. QUALITY ASSURANCE

4.1 Welding and allied processes. The Contractor shall ensure that all welding processes and non-destructive testing (NDT) are in accordance with the MLCA Standard Specification 0740_STD.

4.2 Hose tests. The Contractor shall accomplish a water hose test of the affected spaces in accordance with MLCA Standard Specification 0740_STD, Appendix C, Structural Boundary Tests and Non-destructive Testing.

4.3 Closure tests. On access cuts in way of structural closures, the Contractor shall perform a chalk test in accordance with MLCA Standard Specification 0740_STD, Appendix C.

5. NOTES

5.1 Informational guidance for access boundaries. The following informational guidance is provided to assist the Contractor during the performance of the work specified herein:

5.1.1 Location of boundaries. Boundaries should be between ship framing, bulkheads, and other structural members. When use of existing seams is not practical, cuts should be at least two inches from these members and the toes of other butt welds.

5.1.2 Extent of boundaries. Boundaries may extend across one or more frames as required for the size of opening.

5.1.3 Boundary restrictions. Access cut boundaries should not be made in the sheer, stringer, or bilge strakes, or in the flat keel unless specifically approved by the KO.

5.1.4 Cross welds. Access cuts should intersect or cross existing butts at right angles. Cut back intersecting welds six inches beyond the weld toe of the access cut. The cut back must not intersect or cross an existing weld, frame, or structural member, and may be reduced to a minimum length of two inches if needed to prevent such an intersection.